

CONTINUATION SHEET

Primary # _____
HRI # _____
Trinomial _____

Page 3 of 12

*Resource Name or # (Assigned by recorder) TPP-5

*Recorded by: R.Egherman, B.Hatoff *Date Recorded 9-5-01 ☒ Continuation ☐ Update

Continued from Primary Record

P3a Description

The Stanislaus-Newark Circuits #1 and #2 consist of two distinct sets of towers running parallel to one another separated by a distance of approximately 50 feet. Stanislaus-Newark Circuit #1 on the north was originally built in 1908 for the Stanislaus-Mission San Jose Line, and now also holds the Tesla-Kasson Line in this recorded location. Stanislaus-Newark Circuit #2 on the south was originally built in 1909-1910 to hold the Stanislaus-San Francisco Line, and now also holds the Tesla-Manteca Line in this recorded location. The Tesla-Kasson Line runs from the Tesla Substation to the Kasson Substation for a total distance of approximately 16 miles. The Tesla-Manteca Line runs from the Tesla Substation to the Manteca Substation for a total distance of approximately 14 miles. These 115 kV lines connecting the Tesla and Kasson substations and the Tesla and Manteca substations were first connected to the Stanislaus-Newark Circuits in 1965.

The first set of towers (point A on the Location Map) is constructed of galvanized steel with four legs forming a square at the base. There is 15-feet between each leg at the base. The legs are angled and meet at the apex. These towers have three horizontal cross arms near the top of the structure. Each cross arm holds a set of nine coiled translucent aqua insulators (see Continuation Sheet Photos 1, 2, and 4). There is approximately 500-feet between the first set of towers and the second set of towers.

The second set of towers represents a modification from the original installation. The original towers were replaced in 1988 by taller towers to accommodate the tie-in from the Owens-Illinois substation to a wooden distribution line that runs parallel to Circuits #1 and #2 (see Continuation Sheet photo 7). The wooden distribution line was constructed post 1981 (based on the new appearance of the poles and the fact that they are not depicted on the Tracy, CA USGS 7.5' topographic map (photorevised 1981) or the Midway, CA USGS 7.5' topographic map (photorevised 1980). The distance between the Circuit #2 (Tesla-Manteca) tower base and the wooden distribution line is 45 feet. The Circuit #1 (Tesla-Kasson) replacement tower is marked with "Tesla-Kasson 115kV 7/55". The Circuit #2 (Tesla-Manteca) replacement tower is marked with "Tesla-Manteca 115kV 7/55". These galvanized steel towers have three horizontal cross arms near the apex. These cross arms are in a different configuration than those noted in the first set (point A) of towers (see Continuation Sheet Photo 7).

The distribution line that runs parallel to Circuits #1 and #2 is composed of single wooden poles. One of the poles reads "P-7-87, H-4, 80" and has two metal stamps, one reading "5/5", and each is tagged "Osmos 1999, Woodfume". The line that runs from the Owens-Illinois substation to this wooden distribution line is constructed of a single galvanized steel pole.

Page 4 of 12

*Resource Name or # (Assigned by recorder) TPP-5

*Recorded by: R.Egherman, B.Hatoff *Date Recorded 9-5-01 ☒ Continuation ☐ Update

The third set of towers (point B on Location Map) is similar in appearance to the first set of towers. They are constructed of galvanized steel. The base of the Circuit #1 (Tesla-Kasson) tower has a box-like configuration at the base that differs from the base of the adjacent Circuit #2 (Tesla-Manteca) tower (see Continuation Sheet photos 14 and 15). The Circuit #1 (Tesla-Kasson) tower has three horizontal cross arms with translucent aqua-blue nine-coiled insulators (see Continuation Sheet photo 12). The Circuit #2 (Tesla-Manteca) tower has six horizontal cross arms, but only three hold white ceramic nine-coiled insulators (see Continuation Sheet photo 13). The third set of towers have been stenciled as follows: the Circuit #1 (Tesla-Kasson) tower reads "Stanislaus-Newark Cir-1 69/451"; the Circuit #2 (Tesla-Manteca) tower reads "Stanislaus-Newark Cir-2 70/452".

Continued from Building, Structure, Object Record

B10. Significance

URS Corporation retained historian Laurence H. Shoup, Ph.D. to conduct a review of PG&E's historical records. Dr. Shoup's research conducted on September 10-12, 2001 revealed a long history of maintenance and modifications to the original Circuits #1 and #2. Over the past 70 years numerous towers were replaced and relocated, transmission lines were recondored and upgraded in several areas, and thousands of insulators in the Tracy area were replaced (JRP 2000). Due to growth of population and demand along the systems route, new substations were built which tapped into the Stanislaus-Newark Circuits changing the original configuration and design of the system. Specifically along the three sets of towers recorded for TPP-5 the Tesla-Kasson Line was tapped into in 1976 when PG&E installed a single customer substation at the Owens-Illinois Glass Plant. In 1988 the Owens-Illinois substation was expanded and the line was rerouted. It was at this time that the center set of towers in TPP-5 were replaced by taller towers to accommodate a new transmission line running from the Owens-Illinois substation and connecting to a modern distribution line that runs parallel to the Stanislaus-Newark Circuits #1 and #2 (see photo on Primary Record).

JRP Historical Consulting Services recorded a 17-mile long portion of the Stanislaus-Newark Circuits #1 and #2 in a location approximately 4 miles west of TTP-5. They assessed significance of that segment based on extensive historical research of the entire 137-mile tower system. JRP's evaluation stated that the Stanislaus-Newark Circuits #1 and #2 do not appear to be eligible for listing in the California Register of Historic Resources (CRHR). The following significance evaluation of TPP-5 is based on the significance evaluation from the JRP report of the Circuits #1 and #2, which is pending formal filing.

The entire length of the Stanislaus-Newark Circuits #1 and #2, which TTP-5 is a small part of, does not appear eligible under Criterion A because it has not "made a significant contribution to the broad patterns of our history." This tower system was not the first to carry high-voltage electricity over a great distance, nor was it the first to use steel

towers rather than wooden ones. On the contrary, they are typical examples of transmission lines for their period, utilizing

Page 5 of 12 *Resource Name or # (Assigned by recorder) TPP-5
*Recorded by: R.Egherman, B.Hatoff *Date Recorded 9-5-01 ☒ Continuation ☐ Update

commonly accepted technology and engineering principles that were the result of nearly three decades of development (JRP 2000).

Furthermore, the system does not appear to qualify for listing under Criterion B because it has no known associations with persons important to our history. The potential for eligibility lies with the transmission system's associations with John Debo Galloway, a prominent figure in early hydroelectric development in California. Acting as consulting engineer in 1909, his role was limited to summarizing and evaluating the existing system. It is also possible that he designed the towers used in Circuits #1 and #2. This association, however, is not well documented and is speculative, at best. Therefore, the Stanislaus-Newark Circuits #1 and #2 do not appear to meet the eligibility requirements of Criterion B (JRP 2000).

Under Criterion C the tower system does not appear to be eligible because it does not have distinctive or pioneering engineering features, nor is it the work of a master designer. Additionally the tower system does not appear eligible under Criterion D because it does not appear to be a principal source of important information about historic construction materials or technologies. The towers were commonplace prefabricated structures of a standard design (JRP 2000).